

## Jackson, Susank

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Wednesday, October 30, 2013 3:49 PM  
**To:** Pond, Greg  
**Cc:** Van Ness, Keith; Jackson, Susank; Naibert, Eric; Vassalotti, Virginia  
**Subject:** Ten Mile Creek Station info and data  
**Attachments:** Ten Mile Station Info.xlsx

Hi Greg,

Keith wanted me to send you the remaining Ten Mile Creek station information and data. Attached is a spreadsheet that includes the station locations, fish and benthic taxa lists by station/year, RHAB scores by station/year, physchem data by station/year, and salamander data by station/year.

If you have any questions let me or Keith know.

Thanks,

**Ken Mack**  
Aquatic Biologist  
Montgomery County  
Department of Environmental Protection  
255 Rockville Pike,  
Rockville, MD 20850  
240-777-7729



**Jackson, Susank**

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**Jackson, Susank**

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Monday, July 07, 2014 3:05 PM  
**To:** Jen.Stamp@tetrattech.com  
**Cc:** Van Ness, Keith; Pond, Greg; Jackson, Susank; Gerritsen, Jeroen  
**Subject:** RE: seeking comments on draft BCG report for the Northern Piedmont region of Maryland

Hi Jen,

Sorry I didn't get back to you sooner, but I have had a chance to review the report and have two comments:

- 1) Jai Cole, Matt Harper, and Dave Sigrist work for *Maryland National Capital Park and Planning Commission* or *MNCPPC* (Page ii)
- 2) "The macroinvertebrate BCG model outputs should be interpreted with caution and checked using professional assessment if: 1) samples are collected early or late in the index period; 2) if levels of taxonomy are inconsistent with those used in the calibration dataset (e.g., if Chironomidae are not identified to the subfamily or tribe-level); and 3) if there are more than 120 total individuals in the sample."

Was macroinvertebrate tier assignment correlated to number of individuals in the sample? After quickly glancing at the validation files it appears almost half of the sites assessed had more than 120 individuals, and those with 120 individuals contain only a subset of the original sample. In the discussion section (end of first paragraph on page 33) it says additional caution must be taken when a sample contains greater than 120 individuals. When should a subset of 120 individuals be used in place of the original sample? Were samples that were subsampled to 120 individuals found to have different tier assignments than those that were not reduced to 120 individuals?

Thanks,

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Montgomery County  
Department of Environmental Protection  
255 Rockville Pike  
Rockville, MD 20850  
240.777.7729

**From:** Stamp, Jen [mailto:Jen.Stamp@tetrattech.com]

**Sent:** Wednesday, July 02, 2014 1:30 PM

**To:** Pond.Greg@epa.gov; EFriedman@dnr.state.md.us; Warren.Smigo@deq.virginia.gov; William.Shanabruch@deq.virginia.gov; Ellen.Dickey@state.de.us; mstover@mde.state.md.us; mbaker@umbc.edu; NDziepak@dnr.state.md.us; Matthew.Harper@montgomeryparks.org; David.Sigrist@montgomeryparks.org; aeeverett@pa.gov; cluckett@mde.state.md.us; Jeanne.Classen@deq.virginia.gov; aleslie@umd.edu; cmswan@umbc.edu; agriggs@icprb.org; Jordahl, Dave; Alexander.Laurie@epa.gov; SSTRANKO@dnr.state.md.us; Reynolds.Louis@epa.gov; Jcummins@ICPRB.org; msoutherland@Versar.com; abecker@dnr.state.md.us; Jai.Cole@montgomeryparks.org; cpoukish@mde.state.md.us; borsuk.frank@epa.gov; Mack, Kenny; JKilian@dnr.state.md.us; St. John, Jennifer; Van Ness, Keith; cgougeon@dnr.state.md.us; Naibert, Eric; Jackson.Susank@epa.gov; Shofar, Steven; Curtis, Meosotis; mary.dolan@montgomeryplanning.org; mark.symborski@montgomeryplanning.org; Forren.John@epa.gov; DBOWARD@dnr.state.md.us

**Cc:** Gerritsen, Jeroen

**Subject:** seeking comments on draft BCG report for the Northern Piedmont region of Maryland

Hello everyone,

If your schedule permits, we'd greatly appreciate it if you could review the draft BCG report for the Northern Piedmont region of Maryland and provide comments (the report was sent out in a June 12 email – please let me know if you need me to resend it).

If possible, we ask that you provide comments by **Friday July 11<sup>th</sup>**.

Thank you for your participation, and have a great 4<sup>th</sup> of July holiday!

Jen

Jen Stamp | Aquatic Ecologist

Voice: 802.229.4508 (office) 802.839.8603 (cell) | Fax: 802.223.6551 [Jen.Stamp@tetrattech.com](mailto:Jen.Stamp@tetrattech.com)

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73 Main Street, Suite 38 | Montpelier, VT 05602 | [www.ttwater.com](http://www.ttwater.com) | NASDAQ:TTEK

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## Jackson, Susank

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Tuesday, July 08, 2014 8:52 AM  
**To:** Pond, Greg; Jen.Stamp@tetrattech.com  
**Cc:** Van Ness, Keith; Jackson, Susank; Gerritsen, Jeroen  
**Subject:** RE: seeking comments on draft BCG report for the Northern Piedmont region of Maryland

Thanks for getting back to me so quickly Greg. My practical concern stems from utilization of the BCG to assess our data set. Almost half our samples contain greater than 150 individuals. The number of individuals will have to be a consideration as we run our data.

Thanks,

**Ken Mack**  
Aquatic Biologist  
Montgomery County  
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255 Rockville Pike,  
Rockville, MD 20850  
240-777-7729

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**From:** Pond, Greg [mailto:Pond.Greg@epa.gov]  
**Sent:** Monday, July 07, 2014 5:19 PM  
**To:** Mack, Kenny; Jen.Stamp@tetrattech.com  
**Cc:** Van Ness, Keith; Jackson, Susank; Gerritsen, Jeroen  
**Subject:** RE: seeking comments on draft BCG report for the Northern Piedmont region of Maryland

Thank you Kenny for these observations. I had sent Jen comments earlier that changed the wording on this in the methods section to recognize 100-150 organisms. In the second workshop, we did re-assess sites using 120 that previously had sometimes >300 organisms, to see if panelists would change their assessment. I don't believe we had a sample size of sites worth analyzing statistically but we did this for observational purposes only. The 120 computer subsample of MoCo data was absolutely necessary to strike a balance between MBSS and MoCo datasets. There were some samples that had >150, but I believe these were re-do's and I'm not sure they count, but Jen and Jeroen could confirm. To answer your question, I do not believe tiers would be correlated with increasing number of individuals, since the samples came from a variety of conditions (good, bad, ugly). That said, I wonder if it is worthwhile addressing those several samples in a paragraph that the panel re-assessed with the 120 standard subsample. My memory is that they did not change for nominal assignments but might have changed to a (+) or (-) within a tier ....

Greg

**From:** Mack, Kenny [mailto:Kenny.Mack@montgomerycountymd.gov]  
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[DBOWARD@dnr.state.md.us](mailto:DBOWARD@dnr.state.md.us)

**Cc:** Gerritsen, Jeroen

**Subject:** seeking comments on draft BCG report for the Northern Piedmont region of Maryland

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Thank you for your participation, and have a great 4<sup>th</sup> of July holiday!

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## Jackson, Susank

---

**From:** Jackson, Susank  
**Sent:** Thursday, November 13, 2014 12:39 PM  
**To:** kenny.mack@montgomerycountymd.gov  
**Cc:** meosotis.curtis@montgomerycountymd.gov; Pond, Greg; Reynolds, Louis  
**Subject:** MoCO case study as part of BCG technical document  
**Attachments:** MoCo outline - 11-5-14.docx

Corrected email for Kenny Mack!

---

**From:** Jackson, Susank  
**Sent:** Thursday, November 13, 2014 12:31 PM  
**To:** meosotis.curtis@montgomerycountymd.gov; kenneth.mack@montgomerycountymd.gov  
**Cc:** Pond, Greg; Reynolds, Louis  
**Subject:** MoCO case study as part of BCG technical document

Greg Pond and Lou Reynolds have recommended you both as the "go to" county scientists to follow up on about the Montgomery County Biological Condition Gradient (BCG) model that was developed last year and used to inform the county council in their consideration of development in Ten Mile Creek watershed.

This year we (the USEPA biocriteria program) are developing a methods document on the development and application of the BCG model to support Water Quality Management. With the county's approval, I would like to include the Montgomery County BCG project as one of the case examples illustrating application of the model to inform decision making. Below is my email to Greg and Lou explaining this and an outline of the case example is attached. The first page is a short summary (bullet format) of the key applications that we are organizing the case studies to illustrate. The second page is the outline for this case study - in a very general form. The case studies will be approximately 5 pages with graphics.

Please consider this request and affirm that you both are the key contacts. We would like to also get input from the full expert group involved in the BCG model development but the primary dialog and editing authority would be with you or others from the county. And, of course, most important is that your program is comfortable with us writing up the case study and including it in our technical document. I think the Montgomery County BCG model development and application would provide an outstanding contribution to the document.

I know that Mary Dolan has retired and we would like to coordinate with the planning staff. I would like to know if you, or someone in your program, prefer to be the contact and coordinate with the planning group or if we should communicate with you and with someone in planning group simultaneously.

Once I hear back from you, and presuming you grant us the go ahead to write up and include the case study in our document, I would like to set up a teleconference to discuss and for our editor (Clair Meehan) to hear directly what you think is most important to communicate.

Thank you,

Susan Jackson  
USEPA Biocriteria Program

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**From:** Jackson, Susank  
**Sent:** Wednesday, November 5, 2014 3:21 PM  
**To:** Pond, Greg; Reynolds, Louis  
**Subject:** MoCO case study as part of BCG technical document

We are beginning work on writing a national program document on development and application of the BCG to support WQM (with focus on biocriteria). We are planning to highlight MoCo BCG as a case study (unless the county does not wish to be included). Attached is a draft outline, with a first page identifying key application benefits and, at the bottom, a very very simple outline of the document.

Please take a look and let me know if you are on board with this. Also, if you have any immediate edits to key messages, lessons learned, etc.

Once I hear back from you, I would like to contact the county (new folks since Keith and Mary have retired!) to go forward on this in the write up. We have editing and writing support through a contract with Tetra Tech (Claire Meehan), including technical expertise (Jeroen Gerritsen).

Hope all is well with you both and look forward to engaging you on this.

PS – we just came out of lock down in the EPA buildings in DC due to Tea Party Protesters appearing to want to storm the EPA building – if I have my information correct, they were protesting a recent EPA decision re a Kentucky issue (my guess, something to do with mining and water quality).

Susan



## Jackson, Susank

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Monday, November 17, 2014 1:00 PM  
**To:** Jackson, Susank  
**Cc:** Curtis, Meosotis; Pond, Greg; Reynolds, Louis  
**Subject:** RE: MoCO case study as part of BCG technical document

Hi Susan,

Meo and I would be happy to be the County contacts regarding the Montgomery County BCG. We also have no problem with your use of the BCG in the methods document you are developing.

I reviewed the outline you included and that seems to cover the important topics. I am hopeful that the BCG will give us a better way to detect and communicate subtle changes in both fish and macroinvertebrate assemblages during land use conversion and stream restoration. The BCG may prove helpful in detecting changes in stream condition resulting from new ESD practices.

We would suggest communicating with the Planning Department directly. Pamela Dunn is the acting chief for Mary Dolan's section. Her email address is [Pamela.Dunn@mncppc-mc.org](mailto:Pamela.Dunn@mncppc-mc.org) and phone number is 301-650-5649.

We look forward to working with you on the Methods Document.

Thank you,

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## Jackson, Susank

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Tuesday, November 18, 2014 3:28 PM  
**To:** Jackson, Susank  
**Cc:** Curtis, Meosotis; Pond, Greg; Reynolds, Louis; Reynolds, Louis; Meehan, Clair; Gerritsen, Jeroen  
**Subject:** RE: My apologies: Meo, not Curits, is first name! Typing too fast and I know too many Curtis's so am on autopilot

Hi Susan,

Both Meo and I will be available at 1pm on Thursday. We look forward to discussing the write up.

Thanks,

Ken

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**Subject:** RE: MoCO case study as part of BCG technical document

Kenny and Curtis,

Can you join us on a call on Thursday at 1:00 pm to discuss the outline and provide your take on key messages and information you think is key to communicate? Claire Meehan (Tetra Tech) is the editor/writer for this case study and we would like her to hear from you directly then just rely upon written materials that we have provided her. Additionally, as she drafts the case study, she may contact you with questions and also run draft text by you for review and contact.

If you cannot this Thursday, we will schedule a time for next week!

Claire was the editor/writer for the two biological criteria documents that we have released recently – The “Primer” and the “Biological Assessment Program Review.” We will be producing a document that is similar in look and structure.

If you can make it this Thursday at 1:00 pm, the number is 1 866 299 3188, password/code is 2025661112.

I will follow up with Pamela Dunning as you suggested.

Susan Jackson



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Susan Jackson  
USEPA Biocriteria Program

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**From:** Jackson, Susank  
**Sent:** Wednesday, November 5, 2014 3:21 PM  
**To:** Pond, Greg; Reynolds, Louis  
**Subject:** MoCO case study as part of BCG technical document

We are beginning work on writing a national program document on development and application of the BCG to support WQM (with focus on biocriteria). We are planning to highlight MoCo BCG as a case study (unless the county does not wish to be included). Attached is a draft outline, with a first page identifying key application benefits and, at the bottom, a very very simple outline of the document.

Please take a look and let me know if you are on board with this. Also, if you have any immediate edits to key messages, lessons learned, etc.

Once I hear back from you, I would like to contact the county (new folks since Keith and Mary have retired!) to go forward on this in the write up. We have editing and writing support through a contract with Tetra Tech (Claire Meehan), including technical expertise (Jeroen Gerritsen).

Hope all is well with you both and look forward to engaging you on this.

PS – we just came out of lock down in the EPA buildings in DC due to Tea Party Protesters appearing to want to storm the EPA building – if I have my information correct, they were protesting a recent EPA decision re a Kentucky issue (my guess, something to do with mining and water quality).

Susan

## Jackson, Susank

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Wednesday, January 13, 2016 2:16 PM  
**To:** Jackson, Susank; St. John, Jennifer  
**Cc:** Pond, Greg; Reynolds, Louis; Forren, John  
**Subject:** RE: Check in re BCG case example for Montgomery County

Hi Susan,

I have received the case study and chapter 3. I will review what I can before next Tuesday.

**Ken Mack**  
Aquatic Biologist  
Montgomery County  
Department of Environmental Protection  
255 Rockville Pike,  
Rockville, MD 20850  
240-777-7729

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**From:** Jackson, Susank [mailto:Jackson.Susank@epa.gov]  
**Sent:** Wednesday, January 13, 2016 1:42 PM  
**To:** Mack, Kenny; St. John, Jennifer  
**Cc:** Pond, Greg; Reynolds, Louis; Forren, John  
**Subject:** Check in re BCG case example for Montgomery County

We are nearing final agency review of the BCG technical support document and hope to be releasing it soon. I know you have provided review on this case study and on sections of chapter 3 this past fall. But, I would like to alert you to the impending release as well as provide a final opportunity for your input.

Attached is the case study as well as chapter 3 which uses some of the analysis that went into the BCG as examples to illustrate steps in the development process. In the case study I highlighted some clarifying text and highlighted that in yellow. In chapter 3 I highlighted the references to Montgomery County.

Please affirm you have received this and please provide any final edits by Tuesday next week. Also, please confirm that your management has reviewed and approved this case study.

Thank you! This is a great case study – and one that my management has been very interested in. I recently briefed my office director and we discussed the Montgomery BCG as an example of how the BCG can be used to inform decision making in a constructive way.

Susan Jackson



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Susan Jackson





## Jackson, Susank

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**From:** Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
**Sent:** Wednesday, February 17, 2016 10:41 AM  
**To:** Jackson, Susank; St. John, Jennifer  
**Subject:** RE: The Biological Condition Gradient Technical Support Document

Hi Susan,

We got your email, and I'm excited to read the finalized document.

Thanks,

Ken

-----Original Message-----

From: Jackson, Susank [mailto:Jackson.Susank@epa.gov]  
Sent: Wednesday, February 17, 2016 10:35 AM  
To: St. John, Jennifer <Jennifer.St.John@montgomerycountymd.gov>  
Cc: Mack, Kenny <Kenny.Mack@montgomerycountymd.gov>  
Subject: The Biological Condition Gradient Technical Support Document

Hello Jennifer and Kenny, the technical support document on the Biological Condition Gradient (BCG) is finally ready to be released. Below is the website - the document is listed as a 2016 document with the title: A Practitioner's Guide to the Biological Condition Gradient: A Framework to Describe Incremental Change in Aquatic Ecosystems.

Please confirm that you receive this. Notification will be sent out via EPA Water Headlines "email" letter. I apologize for the delay in notifying you - the system shut down on me earlier and I am just now getting back on.

<http://www.epa.gov/wqc/biological-assessment-technical-assistance-documents-states-tribes-and-territories>

The contribution from Montgomery County in developing and piloting the BCG is deeply appreciated. The Montgomery County case study is included in chapter 6.

Susan Jackson

